

In re patent application of Douglas D. DeMasi, Sr.

SN 09/845,999 Filed: 9/24/2001

For "Universal Flying Hawk"

: Art Unit 3714

: Examiner Miller, Bena B.

8 Scenic Drive; Hagan Farms Poughkeepsie, NY 12603-5521 May 21, 2007

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
Mail Stop Appeal Brief - Patents

#### APPEAL BRIEF

Sir:

Appellant hereby files in triplicate a Brief in support of the Notice of Appeal to the Board of Appeals and Interferences dated March 29, 2007 and filed April 3, 2007, on the Examiner's Final Rejections of claims 21-42 and 44-51 in the Office Action mailed 1/9/07; and on the Examiner's refusal, per the Advisory Action mailed 3/12/07, to enter the amendments proposed in the Amendment After Final dated 2/17/07 and filed 2/20/07 and allow the application.

In partial response to the FINAL Office Action mailed 1/9/07 and the Advisory Action mailed 3/12/07, applicant on April 3, 2007 filed a Petition (dated March 29, 2007) to the Commissioner for Patents in the above-identified application (A) to set aside the action of 1/9/07 as FINAL; (B) to overrule the Examiner's refusal to enter, per the Advisory Action mailed 3/12/07, the amendments proposed in the Amendment After Final dated 2/17/07 and filed 2/20/076; (C) to overrule the Examiner's rejection under 35 USC 112, first paragraph, in the 1/9/07 Action that claims 21-33, 38-42 and 44-51 fail "to comply with the written description requirement"; and (D) to overrule the Examiner's rejection under 35 USC 112, first paragraph, in the 1/9/07 Action that claims 21-33,38-42 and 44-51 are "indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention".

The Amendment After Final dated February 17, 2007 and filed February 20, 2007, stands not entered because the Examiner in the Advisory Action mailed 3/12/07 thought that the proposed amendments (a) "raise new issues that would require further consideration and/or search", and (b) raise the issue of new matter".

No decision has been received on the Petition.

Attached is the fee set forth in section 41.20(b)(2).

There follows the items under appropriate headings and in the order indicated in paragraph (c)(1)(i) through (c)(1)(x) of section 41.37 "Appeal Brief":

## (i) Real party in interest.

The real party in interest is Douglas D. DeMasi, the inventor. He resides at 1214 Beekman Rd.; Hopewell Junction, NY 12533.

## (ii) Related Appeals and Interferences.

No other prior and pending appeals, interferences or judicial proceedings are known to appellant, or assignee which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending Appeal, other than the Petition identified above.

#### (iii) Status of Claims.

Claims 1- 20 and 43 stand canceled.

Claims 21-42 and 44-51 stand rejected.

Claims 21-42 and 44-51 are being appealed.

#### (iv) Status of Amendments.

The Amendment After Final dated 2/17/07 and filed 2/20/07, was not entered, per Advisory mailed 3/12/07. As noted above, a Petition on the propriety the Examiner's refusal to enter, per the Advisory Action mailed 3/12/07, the amendments proposed in the Amendment After Final dated 2/17/07 and filed 2/20/076, is pending.

(v) Summary of Claimed Subject Matter.

Claims 21, 28, 34, and 38 are the independent claims involved in the appeal.

Claim 21 is directed to a rider recreational product having a wing section (wing 12 - Figs. 1, 3, 4 & 5; 2<sup>nd</sup> paragraph, page 7 of Second Substitute Specification) and a fuselage or tail section (surfboard-like fuselage or tail section or portion 14 - Figs. 1, 2, 4 & 5; 2<sup>nd</sup> paragraph, page 7 of Second Substitute Specification) for skimming on water and flying through the air aerodynamically and separable into two sections. The product comprises a first section constituting the wing of the product and deriving its lift in flight from forces resulting from its motion through air (last sentence, last paragraph, page 8; sentence beginning in last line on page 10, through last sentence in first full paragraph on page 11). It must be independently usable as a rideable element (paragraph beginning on bottom of page 7 and continuing on page 8). A second section constitutes the fuselage or tail section of the product and is independently usable as a surfboard or ski (surfboard-like fuselage or tail section or portion 14 - Figs. 1, 2, 4 & 5; 2<sup>nd</sup> paragraph, page 7 of Second Substitute Specification; paragraph beginning on bottom of page 9 and continuing on page 10, and the next paragraph).

Claim 28 is directed to a board usable as a fuselage or tail section (fuselage or tail section 14 - Figs. 1, 2, 4, &5; paragraph beginning on bottom of page 9 and continuing on page 10, and the next paragraph) of a recreational product for skimming on water and flying through the air aerodynamically and usable independently as a surfboard or ski. The board comprises a generally thin and flat elongated portion, a wider rear end on the elongated portion, and thin fins 48 extending upwardly when used as a ski and downwardly when used as a surfboard (Fig. 4; first sentence, last paragraph, page 9) and longitudinally (Fig. 4; second sentence, last paragraph, page 9) from a surface of the wider rear end and that are upwardly when the board is attached to the recreational product for aiding control when the product is in motion aerodynamically.

Claim 34 is directed to a device comprising a thin, wide body (wing 12 - Figs. 1, 3, 4 & 5; 2<sup>nd</sup> paragraph, page 7 of Second Substitute Specification) usable as an aerodynamically-supporting wing of a waterborne and airborne recreational vehicle and independently as a rideable element. It comprises a central front end portion (central front end 38 - Figs. 1, 3, 4 & 5; 2<sup>nd</sup> paragraph of page 9), a wide rearward portion, and a

central rearward portion having a rearward facing opening (rearward facing opening or socket 16 - Fig. 3) for receiving an attachment rendering the body the wing of a recreational vehicle 10 (Figs. 1, 4 & 5).

Claim 38 is directed to a rider recreational product 10 (Fig. 1, 4. & 5) having a wing 12 and a fuselage or tail section 14 for skimming on water and flying through the air aerodynamically (last sentence, last paragraph, page 8; sentence beginning in last line on page 10, through last sentence in first full paragraph on page 11) and separable into two sections. It comprises a first section constituting the wing 12 of the product and deriving its lift in flight from forces resulting from its motion through air and independently usable as a rideable element, and a second section 14 constituting the fuselage or tail section of the product and independently usable as a surfboard or ski. The first section has longitudinally-extending control fins 34 (Fig. 4; first paragraph on page 9) on its underside for withstanding rugged or slow turns in water and air.

- (vi) Grounds of rejection to be reviewed on Appeal.
- A. Whether claims 21-33, 38-42 and 44-51 were properly finally rejected under 35 USC 112, first paragraph, as failing to comply with the written description requirement;
- B. Whether claims 21-33, 38-42 and 44-51 were properly finally rejected under 35 USC
   112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention;
- C. Whether claims 21-32, 34-36, 38-42, and 44-51, as best understood, were properly rejected under 35 USC 102(b) as being anticipated by either Zistl (DE4332216A) or Clayton (US 4,898,345) or Rock (US 5,152,705);
- D. Whether claims 33 and 37 were properly rejected under 35 USC 103(a) as being unpatentable over either Zistl (DE4332216A) or Clayton (US4,898,345) or Rock (US5,152,705) in view of Saghri (US5,498,184); and
- E. Whether the Examiner's refusal, per the Advisory Action mailed 3/12/07, to enter the amendments proposed in the Amendment After Final dated 2/17/07 and filed 2/20/07, was proper.

A. Claims 21-33, 38-42 and 44-51 were <u>not</u> properly finally rejected under 35 USC 112, first paragraph, as failing to comply with the written description requirement.

Claims 21-33, 38-42 and 44-51 were finally rejected under 35 USC 112, first paragraph, as failing to comply with the written description requirement, the Examiner alleging that the "claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Regarding claims 21, 28, 38 and 44, the subject matter 'deriving its lift in flight from forces resulting from its motion through air', as now amended, is not supported by the original specification and therefore, now constitute New Matter."

Appellant urges that "airborne" means "deriving its lift in flight from forces resulting from its motion through air". This is consistent with Webster's New Collegiate Dictionary Copyright (C) 1977 by G. C. Merriam Co. definitions for "airborne": "1. supported wholly by aerodynamic forces; 2. transported by air". Thus appellant submits that the invention was described in the Specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Other references in the Specification support this interpretation of "airborne".

Appellant believes that claims 21-33, 38-42 and 44-51 comply with the written description requirement.

B. Claims 21-33, 38-42 and 44-51 were <u>not</u> properly finally rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 21-33, 38-42, and 44-51 were finally rejected under 35 USC 112, second paragraph, as being indefinite, the Examiner observing, inter alia, that regarding "claims 21, 28, 38, and 44, it is not clear whether the product derives its lift in flight from forces resulting from its motion through air". Appellant urges that it is clear. Appellant's Specification uses the term "airborne" many times: it appears early, line 7 of page 3, in the statement of the more specific object. Moreover, the claim phrase "derives its lift in

flight from forces resulting from its motion through air" accords with Webster's New Collegiate Dictionary, Copyright © 1977 by G. & C. Merriam Co., definitions for "airborne": "1: supported wholly by aerodynamic and aerostatic forces; 2: transported by air". The claimed product derives its lift in flight from forces resulting from its motion through air.

Regarding claim 28, the Examiner observed that "it is not clear whether the fins act as a ski when the thin fins extends upwardly from a surface of the wider rear end and acts as a surfboard when the thin fins extends longitudinally from a surface of the wider rear end." As set forth in claim 28 of the Amendment dated October 16, 2006 and filed October 18, 2006 (postcard receipt): "and thin fins extending upwardly when used as a ski and downwardly when used as a surfboard and longitudinally ...."

The Examiner also observed: "Further, it appears that 'that are upwardly when the board is attached" is a method step and it is not clear how the phrase further structurally define the claimed apparatus'. Appellant urges that the limitation requires that the fins must extend upwardly when the board is attached. This is a functional and structural statement, and believed proper.

Regarding claims 29-32, the Examiner observed that "it is not clear how the limitation 'when the board is attached' further structurally limit the claim". Appellant urges that the claims further structurally limit the claims by requiring that "the surface that is upwardly when the board is attached to the recreational product", "has control elements on its upper surface for engagement by the rider'.

Regarding claim 34, the Examiner observed that "the phrase 'for receiving an attachment rendering the body the wing of a recreational vehicle' is confusing".

Appellant apologizes for any confusion but believes the phraseology does say that that the body is rendered "the wing of a recreational vehicle" when the body "central rearward portion" receives an attachment.

Regarding claim 41, the Examiner observed that "it is not clear how the central longitudinal fin is connected". Claim 38 specifies inter alia: "the first section having longitudinally-extending control fins on its underside for withstanding rugged or slow turns in water and air". Claim 41 merely locates one longitudinal fin. It is connected to the underside of the first section.

C. Claims 21-32, 34-36, 38-42, and 44-51, were <u>not</u> properly rejected under 35 USC 102(b) as being anticipated by either Zistl (DE4332216A) or Clayton (US 4,898,345) or Rock (US 5,152,705

Claims 21-32, 34-36, 38-42 and 44-51 were rejected under 35 USC 102(b) as being anticipated by either of Zistl (DE4332216A) or Clayton (US Patent 4,898,345) or Rock (US Patent 5,152,705). Reversal of the rejection is believed proper. None of the references teach appellant's claimed invention.

Zistl discloses a sailboard employing variously-angled fins for stability in different water conditions.

Clayton discloses a skyboard for riding air currents (like surfboards for riding waves of the ocean). It has a pair of front wings and a pair of rear wings on its lateral sides, a pair of fins on its underside and a pair of foot or shoe binders on its upper surface for the rider's feet or shoes. It functions like a glider, except that it is guided by rider standing on it (like the surfboard). A parachute may be attached to it, and triggered to save the skyboard during falling, for reuse. The rider may wear a parachute to save himself in the event of trouble. The pair of front side wings and rear side wings may be removably attached to the lateral sides of the skyboard, to facilitate transportation.

Rock elongated discloses surfboards and wakeboards having downwardly extending sets of movable fins at their front and rear ends which interact via water flow under the board to lower or raise the other.

On the other hand, claim 21 (and its dependent claims) is directed to a rider recreational product having a wing section and a fuselage or tail section for skimming on water and flying through the air aerodynamically and separable into two sections, comprising a first section constituting the wing of the product and deriving its lift in flight from forces resulting from its motion through air and independently usable as a rideable element, and a second section constituting the fuselage or tail section of the product and independently usable as a surfboard or ski. None of Zistl, Clayton, or Rock teach "a second section constituting the fuselage or tail section of the product and independently usable as a surfboard or ski", or alternatively, "a first section constituting

the wing of the product and deriving its lift in flight from forces resulting from its motion through air and independently usable as a rideable element".

Thus claim 21 and its dependent claims 22-27 are patentable over each of Zistl, Clayton, and Rock, for several reasons each.

Claim 34 (and its dependent claims) are directed to a device comprising a thin, wide body usable as an aerodynamically-supporting wing of a waterborne and airborne recreational vehicle and independently as a rideable element, comprising a central front end portion, a wide rearward portion, and a central rearward portion having a rearward facing opening for receiving an attachment rendering the body the wing of a recreational vehicle. None of Zistl, Clayton, or Rock teach inter alia a body with a central rearward portion having a rearward facing opening for receiving an attachment rendering the body the wing of a recreational vehicle.

Thus, claims 34 (and its dependent claims 35-37) are patentable over each of Zistl, Clayton, and Rock.

Claim 38 (and its dependent claims) are directed to a rider recreational product having a wing and a fuselage or tail section for skimming on water and flying through the air aerodynamically and separable into two sections, comprising a first section constituting the wing of the product and deriving its lift in flight from forces resulting from its motion through air and independently usable as a rideable element, and a second section constituting the fuselage or tail section of the product and independently usable as a surfboard or ski, the first section having longitudinally-extending control fins on its underside for withstanding rugged or slow turns in water and air. None of Zistl, Clayton, or Rock teach a two-section product comprising a first section constituting the wing of the product and deriving its lift in flight from forces resulting from its motion through air and independently usable as a rideable element, and a second section constituting the fuselage or tail section of the product and independently usable as a surfboard or ski. The claims additionally distinguish by requiring the first section having longitudinally-extending control fins on its underside for withstanding rugged or slow turns in water and air.

Thus, claims 38 (and its dependent claims 39-42) are patentable over each of Zistl, Clayton, and Rock.

Claim 44 (and its dependent claims) are directed to a rider recreational product having wings for skimming on water and flying through air aerodynamically comprising first parts constituting the wings of the product and deriving its lift in flight from forces resulting from its motion through air and engaging the water during skimming on water. None of Zistl, Clayton, or Rock teach a rider recreational product for skimming on water and flying through air aerodynamically, let alone a product comprising first parts constituting the wings of the product and deriving its lift in flight from forces resulting from its motion through air and engaging the water during skimming on water.

Thus, claim 44 (and its dependent claims 45-51) are patentable over each of Zistl, Clayton, and Rock.

Hence, none of claims 21-32, 34-36, 38-42 and 44-51 are anticipated by any of Zistl or Clayton or Rock, and the Examiner should be reversed.

D. Claims 33 and 37 were <u>not</u> properly rejected under 35 USC 103(a) as being unpatentable over either Zistl (DE4332216A) or Clayton (US4,898,345) or Rock (US5,152,705) in view of Saghri (US5,498,184).

Claims 33 and 37 were rejected under 35 USC 103(a) as being unpatentable over either Zistl (DE4332216A) or Clayton (US Patent 4,898,345) or Rock (US Patent 5,152,705) in view of Saghri (US Patent 5,498,184), the Examiner stating that "Saghri teaches that it is well known to provide a recreational board with inflatable material", and that "It would have been obvious [to] one having ordinary skill in the art to use inflatable material as taught by Saghri for the device of either Zistl or Clayton or Rock for the purpose of conveniently storing the device when deflated". Initially, it should be noted that the base claims 29 and 34 for dependent claims 33 and 37 are patentable over Zistl or Clayton or Rock, and that Saghri does not compensate for any of their other deficiencies. Secondly, Saghri does not teach that devices according to appellant's claims 29 and 34 can be satisfactorily modified for conveniently storing the device when deflated.

Thus, appellant believes that claims 33 and 37 are patentable over either Zistl or Clayton or Rock in view of Saghri.

E. The Examiner's refusal, per the Advisory Action mailed 3/12/07, to enter the amendments proposed in the Amendment After Final dated 2/17/07 and filed 2/20/07, was improper.

The Examiner should have entered the amendments proposed in the Amendment After Final dated 2/17/07 and filed 2/20/07. Appellant has been making a good faith effort to place the application in condition for allowance, and believes that each of his efforts have been directed to improving the allowability of the application. The proposed amendments do not (a) "raise new issues that would require further consideration and/or search", and (b) raise the issue of new matter". No true new matter is deemed to exist. Appellant urges that "airborne" means the same as the phrase "deriving its lift in flight from forces resulting from its motion through air".

Furthermore, matters that appellant wished added to the claims after the Final should have been examined for allowability by the Examiner as they should have been searched earlier by the Examiner.

The Amendment After Final dated 2/17/07 and filed 2/20/07 should be ordered entered.

- (viii) Claims Appendix
- **Evidence Appendix** (ix)
- Related Proceedings Appendix (x)

Respectfully submitted.

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Attachment - Check

CERTIFICTE OF MAILING - The undersigned certifies that this correspondence addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, Mail Stop Appeal Brief - Patents; has been deposited in the United States Postal System as first class mail with sufficient postage on May 21, 2007.

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## (xi) Claims Appendix

Claim 21: A rider recreational product having a wing section and a fuselage or tail section for skimming on water and flying through the air aerodynamically and separable into two sections, comprising a first section constituting the wing of the product and deriving its lift in flight from forces resulting from its motion through air and independently usable as a rideable element, and a second section constituting the fuselage or tail section of the product and independently usable as a surfboard or ski.

Claim 22: A recreational product according to claim 21, wherein the wing section has control elements on its upper surface for engagement by the rider.

Claim 23: A recreational product according to claim 21, wherein the tail section has control elements on its upper surface for engagement by the rider.

Claim 24: A recreational product according to claim 21, wherein the wing section has longitudinally extending fins on its underside for facilitating control of the product when in motion.

Claim 25: A recreational product according to claim 21 wherein the tail section has longitudinally extending fins on its upper side for facilitating control of the product when in motion.

Claim 26: A recreational product according to claim 24, wherein the tail section has longitudinally extending fins on its upper side for facilitating control of the product when in motion.

Claim 27: A recreational product according to claim 26, wherein both the wing section and the tail section also have control elements on their upper surfaces for engagement by the rider.

Claim 28: A board usable as a fuselage or tail section of a recreational product for skimming on water and flying through the air aerodynamically and usable independently as a surfboard or ski, comprising a generally thin and flat elongated portion, a wider rear end on the elongated portion, and thin fins extending upwardly when used as a ski and downwardly when used as a surfboard and longitudinally from a surface of the wider rear end and that are upwardly when the board is attached to the recreational product for aiding control when the product is in motion aerodynamically.

Claim 29: A board according to claim 28, wherein the surface that is upwardly when the board is attached to the recreational product has control elements on its upper surface for engagement by the rider.

Claim 30: A board according to claim 28, wherein the surface that is upwardly when the board is attached to the recreational product is of a non-slip material.

Claim 31: A board according to claim 29, wherein the surface that is upwardly when the board is attached to the recreational product is of a non-slip material.

Claim 32: A board according to claim 29, wherein the surface that is upwardly when the board is attached to the recreational product has control elements for engagement by the rider to control the product when it is in motion.

Claim: A board according to claim 29, wherein the board is constituted of upper and lower layers separated by an inflatable bladder.

Claim 34: A device comprising a thin, wide body usable as an aerodynamically-supporting wing of a waterborne and airborne recreational vehicle and independently as a rideable element, comprising a central front end portion, a wide rearward portion, and a central rearward portion having a rearward facing opening for receiving an attachment rendering the body the wing of a recreational vehicle.

Claim 35: A device according to claim 34, and a tow hook secured to the central front end portion.

Claim 36: A device according to claim 34, and fins that extend longitudinally on its underside.

Claim 37: A device according to claim 34, wherein the body is constituted of upper and lower layers separated by an inflatable bladder, and the upper layer has a non-slick upper surface and bears elements for engagement by the rider to control the body when it is in motion.

Claim 38: A rider recreational product having a wing and a fuselage or tail section for skimming on water and flying through the air aerodynamically and separable into two sections, comprising a first section constituting the wing of the product and deriving its lift in flight from forces resulting from its motion through air and independently usable as a rideable element, and a second section constituting the fuselage or tail section of the product and independently usable as a surfboard or ski, the first section having longitudinally-extending control fins on its underside for withstanding rugged or slow turns in water and air.

Claim 39: A rider recreational product for skimming on water and flying through the air and separable into two sections according to claim 38, wherein the first section has a front end, and a tow hook secured to the front end of the first section.

Claim 40: A rider recreational product for skimming on water and flying through the air and separable into two sections according to claim 38, wherein both the wing section and the tail section have control elements on their upper surfaces for engagement by the rider.

Claim 41: A rider recreational product for skimming on water and flying through air and separable into two sections according to claim 38, wherein there is a central longitudinal fin to insure even pressure throughout the first section when in motion.

Claim 42: A rider recreational product for skimming on water and flying through air and separable into two sections according to claim 41, wherein there are longitudinally-extending fins at the outer edges of the first section for added lift and control.

Claim 44: A rider recreational product having wings for skimming on water and flying through air aerodynamically comprising first parts constituting the wings of the product and deriving its lift in flight from forces resulting from its motion through air and engaging the water during skimming on water.

Claim 45: A rider recreational product for skimming on water and flying through air according to claim 44, said product also having a fuselage or tail section, and a second part constituting the fuselage or tail section of the product and engaging the water during skimming on water.

Claim 46: A rider recreational product for skimming on water and flying through air according to claim 44, wherein the first parts constituting the wings of the product and engaging the water during skimming on water have control elements on their upper surfaces for engagement by the rider.

Claim 47: A rider recreational product for skimming on water and flying through air according to claim 45, wherein the second part constituting the fuselage or tail section of the product and that engages the water during skimming on water has control elements on its upper surface for engagement by the rider.

Claim 48: A rider recreational product for skimming on water and flying through air according to claim 44, wherein the first parts constituting the wings of the product and engaging the water during skimming on water have longitudinally extending fins on their undersides for facilitating control of the product when in motion.

Claim 49: A rider recreational product for skimming on water and flying through air according to claim 45, wherein the second part constituting the fuselage or tail section of the product and that engages the water during skimming on water has longitudinally extending fins on its upperside for facilitating control of the product when in motion.

Claim 50: A rider recreational product for skimming on water and flying through air according to claim 48, wherein the second part constituting the fuselage or tail section of the product and that engages the water during skimming on water has longitudinally extending fins on its underside for facilitating control of the product when in motion.

Claim 51: A rider recreational product for skimming on water and flying through air according to claim 50, wherein both the first parts constituting the wings of the product and engaging the water during skimming on water and the second part constituting the fuselage or tail section of the product the wing of the product and engaging the water during skimming on water have control elements on their upper surfaces for engagement by the rider in prone, sitting, kneeling and standing positions.

## (xii) Evidence Appendix

Appellant is unaware of any evidence submitted pursuant to sections 1.130, 1.131, or 1.132 of 37 CFR or of any other evidence entered by the examiner and relied upon by appellant in the appeal.

# (xiii) Related Proceedings Appendix

Appellant is unaware of any decisions rendered by a court or the Board in any proceeding identified pursuant to paragraph (c)(10(ii) of 37 CFR 41.37. A Petition is pending.